



US Army Corps of
Engineers
St. Paul District

Feasibility Study: Blue Earth River Basin in Minnesota and Iowa

Location/Description

The Blue Earth River basin is located in south-central Minnesota and northern Iowa. The Blue Earth River joins the Minnesota River near Mankato, Minnesota.

The Blue Earth River ecosystem has been degraded by land use changes in the watershed that have altered the hydrologic and sediment transport regimes and by impoundment. Extensive artificial drainage made up of public and private ditch and tile systems facilitates the movement of water throughout the watershed. Approximately 86 percent of wetlands once present in the watershed have been lost through drainage. Predominant land use within the watershed is agricultural. Much of the land in the watershed is highly erodible, and the intensive agricultural land use and steep slopes in the lower reaches of the watershed result in considerable bank erosion along stream channels and high suspended sediment concentrations in the river. The Blue Earth River is a major contributor of sediment and nutrients to the Minnesota River.

The Rapidan Dam is located on the Blue Earth River approximately 12 miles upstream of Mankato. The dam, built in 1910, supports hydroelectric power generation, but it also blocks fish passage between the Minnesota River and the 1,200 miles of perennial tributary streams above the dam.

The feasibility study will evaluate measures to restore habitat in the Blue Earth River basin and reconnect it to the Minnesota River ecosystem. The study would assess options at the Rapidan Dam, including removal, modification, and rehabilitation of the structure.

Feasibility study costs would be shared 50/50 between the Corps and the non-Federal sponsor, Blue Earth County.

Status

The reconnaissance report was approved on January 13, 2005. Feasibility study scoping is underway. The current schedule calls for executing a feasibility cost sharing agreement in July 2006, after State and county funds are available. Initial tasks will include geotechnical and hydraulic analyses of the existing dam and foundation to establish the "future without project" condition.

Authority

The study is authorized by a resolution of the Committee on Public Works of the U.S. House of Representatives, May 10, 1962, to determine the advisability of further improvements in the Minnesota River basin for navigation, flood control, recreation, low-flow augmentation, and other related water and land resources.

Fiscal

Federal cost \$383,000

Non-Federal cost \$383,000

Total estimated cost \$766,000

Fiscal year 2006 Federal funds: \$ 80,000